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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO. |
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| 09/693,424  | 10/20/2000  | Michael Boyd         | INTL-0471-P1-US(P7130X)8101 |                  |
| 7590 05/06/2004   |             |                      | EXAMINER                    |                  |
| Timothy N. Trop TROP, PRUNER & HU, P.C. 8554 Katy Freeway, Ste. 100 |             |                      | AHMED, SAMIR ANWAR          |                  |
|   |             |                      | ART UNIT                    | PAPER NUMBER     |
| Houston, TX 77024   |             |                      | 2623                        | 1.6              |
|   |             |                      | DATE MAILED: 05/06/2004     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  | on/  |  |  |  |  |
|---|--|--|--|--|--|--|
|   | Application No.  | Applicant(s)   |  |  |  |  |
| Office Action Comments  | 09/693,424   | BOYD ET AL.  |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |  |  |
|   | Samir A. Ahmed   | 2623   |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply  | ears on the cover sneet with the c   | orrespondence address  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed  rs will be considered timely.  the mailing date of this communication.  D (35 U.S.C. § 133). |  |  |  |  |
| Status  |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on  | <u>.</u> .   |  |  |  |  |  |
| ,   | action is non-final.   |  |  |  |  |  |
| •   |  |  |  |  |  |  |
| closed in accordance with the practice under E  | x parte Quayle, 1935 C.D. 11, 4  | 53 O.G. 213.   |  |  |  |  |
| Disposition of Claims   |  |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-16 and 25-30</u> is/are pending in the application.   |  |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdraw   | vn from consideration.   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-16 and 25-30</u> is/are rejected.   | i)⊠ Claim(s) <u>1-16 and 25-30</u> is/are rejected.  |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   | Claim(s) is/are objected to.   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | B) Claim(s) are subject to restriction and/or election requirement.  |  |  |  |  |  |
| Application Papers  |  |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examine   | r.   |  |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |  |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |  |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> </ul>  |  | )-(d) or (f).  |  |  |  |  |
| 2. Certified copies of the priority documents   | s have been received in Applicat   | ion No   |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |  |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |  |  |  |  |  |
| Attachment(s)   |  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |  |  |  |  |  |  |
| 2) Notice of Praftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail D   | ate  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  | 5) Notice of Informal F<br>6) Other:   | Patent Application (PTO-152)   |  |  |  |  |
| Paper No(s)/Mail Date   | 5/ 🗀 Oulei   |  |  |  |  |  |

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1. Applicant's election without traverse of claims 1-16, and 25-30 in Paper No. 3 is acknowledged.

## Specification

2. The disclosure is objected to because of the following informalities: the specification on page 11, line 20 and page 12, line 2, refers to "the mouse" and "the new mouse", the fingerprint device 10 as recited on page 3, lines 3-4 is "a wireless remote control device". It is not clear what "the mouse" and "the new mouse" refers to?

Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claims 25—30 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a wireless to capture information about an image of the user's fingerprint when the user's finger is positioned over a transmissive button of the wireless device" see Fig. 2, does not reasonably provide enablement for "a wireless device to capture information about an image of the user's fingerprint when the user's finger is positioned over the device, because the transmissive button of the wireless device is the only part that captures the fingerprint image when user's finger is positioned over the button. No other part of the wireless device does that. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in

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scope with these claims. An image of the user's fingerprint is only captured when the user's finger is positioned over a transmissive button of the wireless device and not when the user's finger is positioned on any other part of the device except the button.

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 3, 8-10, 27, 29-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3, recites "a sensor", on line 4. It is not clear whether "a sensor" on line 4 is the same or different from "said sensor" on line 1 of claim 2.

Claim 3, recites the limitation "all of said elements" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

Claim 8, recites the limitation "the button was operated" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 10, recites, "activates a button", on line 3. It is not clear whether "a button" on line 3 is the same or different from "said button" on line 6 of claim 4.

Claim 27, recites "a sensor", on line 4. It is not clear whether "a sensor" on line 4 is the same or different from "said sensor" on lines 2-3 of claim 26.

Claim 27, recites "receiving light reflected from the user's finger over the button ", on line 3-4. Claim 25, recites, "said device captures information about an image of the user's fingerprint when the user's finger is positioned over the device", on lines 5-7. It is

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not clear whether "user's finger over the button" on lines 3-4 of claim 27 is the same or different from "user's finger is positioned over the device" on lines 5-7 of claim 25.

Claim 27, recites the limitation "all of said elements" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

Claim 29, recites the limitation "said wireless device was operated" in line 3.

There is insufficient antecedent basis for this limitation in the claim.

Claim 30, recites the limitation "said wireless device was operated" in lines 4-5.

There is insufficient antecedent basis for this limitation in the claim.

### Obviousness Type Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-7, 11-12, 25-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,337,919 to Dunton in view of O'Connor et al. (U.S. Patent 5,838,306).

Claims 1-3 of the instant application recite the same features of claim 1 of U.S.

Patent No. 6,337,919. "A device" in claims 1-3 is obvious in view of "A mouse" " recited

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in claim 1 of the Patent, because a mouse is a device. Claim 1 of the Patent does not recite a wireless mouse.

O'Connor discloses a wireless mouse (see Fig. 10) which includes a body portion, actuation switches 107 and 109 shown in top of the mouse. The actuation switch 109 includes a transparent or frosted section or window area 111 which is arranged to receive a finger to input control selections from a user (col. 3, lines 42-54, Fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of O'Connor to modify the device of claim 1 of the Patent, by using a wireless mouse (device) because a wireless mouse is easily and freely moved, manipulated and controlled by the user without being limited in movement by the control cable of a wired mouse and without the inconvenience of the mouse cable being tangled with other objects in the vicinity of the moving mouse.

Claims 4-7 of the instant application recite the same features of claim 5 of U.S. Patent No. 6,337,919. "a device" in claims 4-7 is obvious in view of "a mouse" recited in claim 5 of the Patent, because a mouse is a device. Claim 5 of the Patent does not recite a wireless mouse.

O'Connor discloses a wireless mouse (see Fig. 10) which includes a body portion, actuation switches 107 and 109 shown in top of the mouse. The actuation switch 109 includes a transparent or frosted section or window area 111 which is arranged to receive a finger to input control selections from a user (col. 3, lines 42-54, Fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of O'Connor to modify the device of claim 5 of

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the Patent, by using a wireless mouse (device) because a wireless mouse is easily and freely moved, manipulated and controlled by the user without being limited in movement by the control cable of a wired mouse and without the inconvenience of the mouse cable being tangled with other objects in the vicinity of the moving mouse.

As to claim 11, O'Connor further discloses, including using said captured information to authenticate a particular user [comparing the user fingerprint signal (captured information) with authorized fingerprint signals in a memory (authenticate user) (col. 1, lines 55-59)].

As to claim 12, both O'Connor (col. 1, lines 55-62) and claim 6 of the Patent further discloses including identifying a particular user using said captured information and determining whether the user is authorized to initiate a desired transaction.

Claims 25-27 of the instant application recite the same features of claim 7 of U.S. Patent No. 6,337,919. "a device" in claims 25-27 is obvious in view of "a mouse" " recited in claim 7 of the Patent, because a mouse is a device. Claim 7 of the Patent does not recite a wireless mouse.

O'Connor discloses a wireless mouse (see Fig. 10) which includes a body portion, actuation switches 107 and 109 shown in top of the mouse. The actuation switch 109 includes a transparent or frosted section or window area 111 which is arranged to receive a finger to input control selections from a user (col. 3, lines 42-54, Fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of O'Connor to modify the device of claim 7 of the Patent, by using a wireless mouse (device) because a wireless mouse is easily and

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freely moved, manipulated and controlled by the user without being limited in movement by the control cable of a wired mouse and without the inconvenience of the mouse cable being tangled with other objects in the vicinity of the moving mouse.

As to claim 28, both O'Connor (col. 1, lines 55-59) and claim 8 of the Patent further discloses wherein said memory stores instructions that enable said processor to determine the identity of the person who operated said device [comparing the user fingerprint signal with authorized fingerprint signals in a memory or database (identify the user who operated the mouse)].

9. Claims 8-10,13-14, 29-30 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,337,919 to Dunton in view of O'Connor et al. (U.S. Patent 5,838,306) as applied to claims 4,25 above and further in view of Allport (U.S. Patent 5,256,019).

As to claim 8, neither claim 5 nor O'Connor discloses, including determining the time when the button was operated.

Allport discloses a multiple user controller of consumer devices that uses fingerprint, the device determines the time of day or night the user logged-in, the present time of day or night, the type on entertainment or other consumer device being controlled (col. 3, lines 12-15, lines 22-25, lines 50-52). The controller is a hand held remote control to control consumer devices such as televisions, CD players, stereos, tape players, computers, etc (col. 4, lines 52-55). The controller has various actuating buttons to be used for various applications as needed and other buttons such as a mouse associated with predefined functions or may be programmable (col. 5, lines 1-7).

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A conventional controller switches between consumer devices such as televisions, CD players, stereos, tape players by actuating buttons used for various applications and switches between channels on a TV by actuating buttons used for predefined functions. The controller application incorporates factors such as the identity or class of the user, the time of day or night, the category of use (listening to CDs, watching TV, etc.), the category or subject matter of activity within a particular category of use (moves within TV) (col. 8, lines 22-27). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of Allport to modify the combined method of claim 5 of the Patent and O'Connor, by determining the time the user actuates a button on the controller to start watching movies within TV in order to achieve a controller system that adapts to different users very quickly, easily and securely.

As to claim 9, Allport further disclose, further including storing a channel being displayed on a television receiver when said button was operated (col. 7, lines 20-24).

As to claim 10, neither claim 5 nor O'Connor discloses, including determining the nature of a user selection by coordinating the time when the user activates a button, and the program currently being displayed on a television receiver.

Allport discloses a multiple user controller of consumer devices that uses fingerprint, the device determines the time of day or night the user logged-in, the present time of day or night, the type on entertainment or other consumer device being controlled (col. 3, lines 12-15, lines 22-25, lines 50-52). The controller is a hand held remote control to control consumer devices such as televisions, CD players, stereos,

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tape players, computers, etc (col. 4, lines 52-55). The controller has various actuating buttons to be used for various applications as needed and other buttons such as a mouse associated with predefined functions or may be programmable (col. 5, lines 1-7). A conventional controller switches between consumer devices such as televisions, CD players, stereos, tape players by actuating buttons used for various applications and switches between channels on a TV by actuating buttons used for predefined functions. If on Tuesday at 7.45 p.m. (time) the user had been looking at the TV schedules (program currently being displayed on TV receiver) for future time such as Wednesday 8:30 pm to 10 pm, then when the user logged in Wednesday at 6:45 pm, the system return the user to the Wednesday 8:30 pm to 10 pm EPG grid (col. 7, lines 11-24), i.e., the system determines the nature of the user selection based on the time the user looking at the TV schedules (program) currently being displayed on TV. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of Allport to modify the combined method of claim 5 of the Patent and O'Connor, by determining the nature of a user selection by coordinating the time when the user activates a button and the program currently being displayed on a television receiver in order to achieve a controller system that adapts to different users very quickly, easily and securely.

As to claims 13 and 14, neither claim 5 nor O'Connor discloses, including determining whether to enable a user to make a purchase of a product currently being displayed on a television receiver; or including determining whether to enable a user to

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purchase a pay-per-view television program currently being displayed on a television receiver.

Allport discloses a multiple user controller of consumer devices that uses fingerprint, the device determines the time of day or night the user logged-in, the present time of day or night, the type on entertainment or other consumer device being controlled (col. 3, lines 12-15, lines 22-25, lines 50-52). The controller is a hand held remote control to control consumer devices such as televisions, CD players, stereos, tape players, computers, etc (col. 4, lines 52-55). The controller has various actuating buttons to be used for various applications as needed and other buttons such as a mouse associated with predefined functions or may be programmable (col. 5, lines 1-7). The controller restricts access for guests and other users not known to the controller to basic functionality of the devices being controlled. For example the controller prevents access to pay-per-view programming, certain channels, e-commerce (make a purchase of a product) (col. 8, lines 32-41). Conventional pay per view or e-commerce (such as shopping channels), display the pay per view TV programs or the products on the TV screen and ask the viewer to contact them for purchase. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of Allport to modify the combined method of claim 5 of the Patent and O'Connor, by determining whether to enable a user to make a purchase of a product (or a pay per view television program) currently being displayed on a television receiver in order to achieve a controller system that adapts to different users very quickly, easily and securely.

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As to claim 29, refer to claim 8 rejection. Allport further discloses that the controller includes a memory (col. 3, line25-26, col. 9, lines 9-15).

As to claim 30, refer to claim 9 rejection. Allport further discloses that the controller (processor) remotely control a television (col. 4, lines 52-55) and includes a memory (col. 3, line25-26, col. 9, lines 9-15).

10. Claims15-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,337,919 to Dunton in view of O'Connor et al. (U.S. Patent 5,838,306) as applied to claim 4 above and further in view of Sayag (U.S. Patent 5,801,681).

As to claim 15, O'Connor further discloses transferring said information to a host computer (col. 7, lines 16-19). Neither claim 5 nor O'Connor discloses, encrypting said information

Sayag discloses a pointing/control device that detects a fingerprint in contact with an optically transmissive platen (col. 5, lines 13-17). The control device is used for consumer transactions via the internet and interactive television by validating the users fingerprint, then navigate, select options, etc. (col8, line 61-col. 9, line 8). Digital circuitry encrypts the fingerprint image data captured by imaging sensor. This feature is extremely valuable since it protects the fingerprint data integrity against tampering and thus achieves a high level of security (col. 10, lines 38-49). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of Sayag to modify the combined method of claim 5 of the Patent and

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O'Connor, by encrypting the fingerprint information in order to protects the fingerprint data integrity against tampering and thus achieve a high level of security.

As to claim 16, O'Connor further discloses, including transferring said information using a wireless protocol (col. 7, lines 16-20).

#### Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 12. Claims 1-2, 4-7, 11-12, 25-26, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Connor et al. (U.S. Patent 5,838,306).

As to claim 1, O'Connor discloses a wireless device (Fig. 10, mouse 103) comprising:

a substantially radiation transmissive button (col.3, lines 47-54); and

a fingerprint sensor to capture an image of a fingerprint when the user's finger is positioned over the button [CCD device (fingerprint sensor capture an image of the fingerprint when user's finger is placed on area 111 of the actuation button 109 (col. 4, lines 16-24, col. 4, line 63-col. 5, line 3, Fig. 3)].

As to claim 2, O'Connor further discloses, wherein said sensor is adapted to move with said button [the switch areas 111, 113 on switches (buttons) 107, and 109 are implemented with CCDs imaging devices (finger print sensors) and the actuation

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switch 109 is fully operable to provide its normal switching and "hold and drag" functions (col. 4, lines 1-7), i.e., the sensor carried on the button and moves with it].

As to claim 4, refer to claim 1 rejection.

As to claim 5, O'Connor further discloses, wherein capturing an image includes directing a light beam through said button, so that said light may be reflected by the user's finger and detected within said device [Fig. 3, light source 305, light rays 307 reflected by user's fingerprint 303 and detected by sensor 311 inside the mouse].

As to claim 6, O'Connor further discloses, wherein capturing an image includes providing a sensor which produces an image of the user's fingerprint (Fig. 2, item 205) and transmits that image from said device to a host computer (col. 4, lines 28-32).

As to claim 7, refer to claim 2 rejection.

As to claim 11, O'Connor further discloses, including using said captured information to authenticate a particular user [comparing the user fingerprint signal (captured information) with authorized fingerprint signals in a memory (authenticate user) (col. 1, lines 55-59)].

As to claim 12, O'Connor further discloses including identifying a particular user using said captured information and determining whether the user is authorized to initiate a desired transaction (col. 1, lines 55-62, col. 4, lines 43-52).

As to claim 25 [as best understood by the Examiner] refer to claim 1 rejection.

O'Connor further discloses, processor-based system (Fig. 10, PC computer 401)

comprising:

a processor (col.4, lines 28-32, Fig. 10, PC 401);

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a memory coupled to said processor (col.4, line 34); and a wireless device coupled to said processor via a wireless link (Fig.10, mouse 103, col. 5, lines 8-13, col. 7, lines 10-15),

As to claim 26, refer to claim 2 rejection.

As to claim 28, refer to claim 11 rejection.

# Claim Rejections - 35 USC § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 14. Claims 3, 15-16 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Connor et al. (U.S. Patent 5,838,306) as applied to claims 1, 4 and 25 above, and further in view of Sayag (U.S. Patent 5,801,681).

As to claim 3, O'Connor further discloses, further including a light source adapted to direct light through said button, an optical system for receiving light reflected from the user's finger over the mouse button and a sensor [Fig. 3, light source 305, light rays 307 reflected by user's fingerprint 303 on the mouse button, lens 307 (optical system) receives light rays 307 and detected by sensor 311]. O'Connor does not disclose, all of said elements adapted to move with said button.

Sayag discloses a pointing/control device that detects a fingerprint in contact with an optically transmissive platen (col. 5, lines 13-17). As shown in Fig. 11, the control device is fully integrated unit including an LED (light source), image sensor mounted on

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a plastic block which serves as a package, platen and lens, in order to achieve low manufacturing cost and high volume production throughput (Col. 11, lines 23-34). The plastic block is designed and shaped like a conventional computer keyboard key to allow the device to be fully integrated into a standard keyboard occupying the space of a single key (Fig. 13, col. 14, lines 40-45), i.e., the plastic block moves with the movement of the keyboard key. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of Sayag to modify O'Connor's mouse, by integrating the light source, the sensor the transmissive platen, the lens (optical system) in a plastic block that is shaped like a conventional computer keyboard key to allow the device to be fully integrated into a standard keyboard occupying the space of a single key in order to achieve low manufacturing cost and high volume production throughput of the device.

As to claim 27 refer to claim 3, rejection.

As to claim 15, O'Connor further discloses transferring said information to a host computer (col. 7, lines 16-19). O'Connor does not disclose, encrypting said information

Sayag discloses a pointing/control device that detects a fingerprint in contact with an optically transmissive platen (col. 5, lines 13-17). The control device is used for consumer transactions via the Internet and interactive television by validating the users fingerprint, then navigate, select options, etc. (col8, line 61-col. 9, line 8). Digital circuitry encrypts the fingerprint image data captured by imaging sensor. This feature is extremely valuable since it protects the fingerprint data integrity against tampering and thus achieves a high level of security (col. 10, lines 38-49). It would have been obvious

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to one having ordinary skill in the art at the time the invention was made to use the teachings of Sayag to modify O'Connor's method, by encrypting the fingerprint information in order to protects the fingerprint data integrity against tampering and thus achieve a high level of security.

As to claim 16, O'Connor further discloses, including transferring said information using a wireless protocol (col. 7, lines 16-20).

15. Claims 8-10, 13-14, 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Connor et al. (U.S. Patent 5,838,306) as applied to claims 4,25 above and further in view of Allport (U.S. Patent 5,256,019).

As to claim 8, O'Connor does not disclose, including determining the time when the button was operated.

Allport discloses a multiple user controller of consumer devices that uses fingerprint, the device determines the time of day or night the user logged-in, the present time of day or night, the type on entertainment or other consumer device being controlled (col. 3, lines 12-15, lines 22-25, lines 50-52). The controller is a hand held remote control to control consumer devices such as televisions, CD players, stereos, tape players, computers, etc (col. 4, lines 52-55). The controller has various actuating buttons to be used for various applications as needed and other buttons such as a mouse associated with predefined functions or may be programmable (col. 5, lines 1-7). A conventional controller switches between consumer devices such as televisions, CD players, stereos, tape players by actuating buttons used for various applications and switches between channels on a TV by actuating buttons used for predefined functions.

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The controller application incorporates factors such as the identity or class of the user, the time of day or night, the category of use (listening to CDs, watching TV, etc.), the category or subject matter of activity within a particular category of use (moves within TV) (col. 8, lines 22-27). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of Allport to modify O'Connor method, by determining the time the user actuates a button on the controller to start watching movies within TV in order to achieve a controller system that adapts to different users very quickly, easily and securely.

As to claim 9, Allport further disclose, further including storing a channel being displayed on a television receiver when said button was operated (col. 7, lines 20-24).

As to claim 10, O'Connor does not disclose, including determining the nature of a user selection by coordinating the time when the user activates a button, and the program currently being displayed on a television receiver.

Allport discloses a multiple user controller of consumer devices that uses fingerprint, the device determines the time of day or night the user logged-in, the present time of day or night, the type on entertainment or other consumer device being controlled (col. 3, lines 12-15, lines 22-25, lines 50-52). The controller is a hand held remote control to control consumer devices such as televisions, CD players, stereos, tape players, computers, etc (col. 4, lines 52-55). The controller has various actuating buttons to be used for various applications as needed and other buttons such as a mouse associated with predefined functions or may be programmable (col. 5, lines 1-7). A conventional controller switches between consumer devices such as televisions, CD

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players, stereos, tape players by actuating buttons used for various applications and switches between channels on a TV by actuating buttons used for predefined functions. If on Tuesday at 7.45 p.m. (time) the user had been looking at the TV schedules (program currently being displayed on TV receiver) for future time such as Wednesday 8:30 pm to 10 pm, then when the user logged in Wednesday at 6:45 pm, the system return the user to the Wednesday 8:30 pm to 10 pm EPG grid (col. 7, lines 11-24), i.e., the system determines the nature of the user selection based on the time the user looking at the TV schedules (program) currently being displayed on TV. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of Allport to modify O'Connor's method, by determining the nature of a user selection by coordinating the time when the user activates a button and the program currently being displayed on a television receiver in order to achieve a controller system that adapts to different users very quickly, easily and securely.

As to claims 13 and 14, O'Connor not disclose, including determining whether to enable a user to make a purchase of a product currently being displayed on a television receiver; or including determining whether to enable a user to purchase a pay-per-view television program currently being displayed on a television receiver.

Allport discloses a multiple user controller of consumer devices that uses fingerprint, the device determines the time of day or night the user logged-in, the present time of day or night, the type on entertainment or other consumer device being controlled (col. 3, lines 12-15, lines 22-25, lines 50-52). The controller is a hand held remote control to control consumer devices such as televisions, CD players, stereos,

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tape players, computers, etc (col. 4, lines 52-55). The controller has various actuating buttons to be used for various applications as needed and other buttons such as a mouse associated with predefined functions or may be programmable (col. 5, lines 1-7). The controller restricts access for guests and other users not known to the controller to basic functionality of the devices being controlled. For example the controller prevents access to pay-per-view programming, certain channels, e-commerce (make a purchase of a product) (col. 8, lines 32-41). Conventional pay per view or e-commerce (such as shopping channels), display the pay per view TV programs or the products on the TV screen and ask the viewer to contact them for purchase. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the teachings of Allport to modify O'Connor's method, by determining whether to enable a user to make a purchase of a product (or a pay per view television program) currently being displayed on a television receiver in order to achieve a controller system that adapts to different users very quickly, easily and securely.

As to claim 29, refer to claim 8 rejection. Allport further discloses that the controller includes a memory (col. 3, line25-26, col. 9, lines 9-15).

As to claim 30, refer to claim 9 rejection. Allport further discloses that the controller (processor) remotely control a television (col. 4, lines 52-55) and includes a memory (col. 3, line25-26, col. 9, lines 9-15).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir A. Ahmed whose telephone number is 703-305-9870. The examiner can normally be reached on Mon-Fri 8:30am-6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SA

SAMIR AHMED PRIMARY EXAMINER